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Service Manual

CONET



RDS-EON/FM/MW/LW Radio CD Combination with DVD/MD/CD Changer Control

Model DXZ528R

(PE-2469E)

SPECIFICATIONS

Radio section

Tuning system PLL synthesizer tuner

Receiving frequencies: FM 87.5 to 108MHz(0.05MHz

steps)

MW 531 to 1602kHz(9kHz steps) LW 153 to 279kHz(3kHz steps)

CD player section

System: Compact disc digital audio system

Frequency response: 10Hz to 20kHz(±1dB)

 S/N ratio:
 100dB(1kHz)

 Dynamic range:
 95dB(1kHz)

 Distortion:
 0.01%

General

Power output: 4×31W(DIN45324,+B=14.4V)
Power supply voltage: 14.4V DC(10.8 to 15.6V allowable)

negative ground

Current consumption: Less than 15A

Speaker impedance: $4\Omega(4\Omega \text{ to } 8\Omega \text{ allowable})$ Auto antenna rated current: 500mA or less Dimensions(mm): $178(\text{W})\times50(\text{H})\times155(\text{D})$

Weight: 1.5kg

NOTE

- We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.
- Use only CDs bearing the mark
- Do not play heart-shaped,octagonal,or other specially shaped CDs.
- Some CDs recorded in CD-R/CD-RW mode may not be usable.
- Specifications and design are subject to change without notice for further improvement.

COMPONENTS

PE-2469E-A

Main unit	-	1
Mounting bracket	300-7742-00	1
DCP case	335-6035-20	1
Outer escutcheon	370-6009-00	1
Parts bag		
Removal key	331-2497-00	2
Rubber spacer	345-3653-20	1
Screw(M5×8)	716-0726-01	1
A-lead	850-6681-50	1

To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

 Place the parts and wiring back in their original positions after replacement or re-wiring.

For proper circuit construction, use of insulationt ubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially parned using clamps to keep away from heated and high coltage parts. Ensure that they are placed back in their triginal positions after repair or inspection.

If extended damage is caused due to negligenced uring

repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair.

Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary ploblems around the repaired spots

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company

4. Caution in removal and making wiring connection to the parts for the automobile.

Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions regarding chips.

Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.

- 6. Cautions in handling flexible PWB Before working with a soldering iron, make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly(more than three times)to the same patterns. Also take care not to apply the tip with
- 7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the
- 8. Cautions in checking that the optical pickup lights up. The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.
- 9. Cautions in handling the optical pickup The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.
- 9-1. Laser diode

The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage

9-2. Actuator

The actuator has a powerful magnetic circuit. If a magnetic material is put close to it. Its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

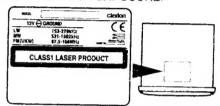
9-3. Cleaning the lens

Dust on the optical lens affects performance. To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

CAUTIONS

This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCTI". To use this model properly, read this Owner's Manual carefully and keep this manual for your future reference. In case of any trouble with this player, please contact your nearest "AUTHORIZED service station". To prevent direct exposure to the laser beam, do not try to open the enclosure

USEOF CONTROLS OR ADJUSTMENTS OR PERFOR-MANCE OF PROCEDURES OTHER THAN THOSE SPECI-FIED IN THE OWNER'S MANUAL MAY RESULT IN HAZ-ARDOUS RADIATION EXPOSURE



INOTES OF ISO CONNECTOR

 For VW and Audi vehicles, change the position of fuse installation as shown on the diagram. (Figure 1)

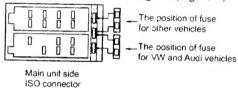
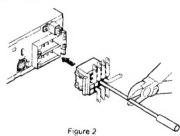


Figure 1

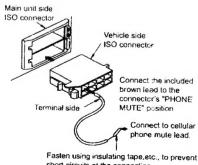
2. When the car stereo is installed in 1998 and later Volkswagen models, make sure to cut the car lead wire connected the A-5 terminal. (A breakdown could occur if the lead wire is not cut.) After cutting the lead wire, insulate the front end of the lead wire with insulation tape to prevent the risk of short-circuits. (Figure 2)

Note: Before cutting the lead wire, disconnect the car battery - (negative) cable.

3. When the Main unit is also connected to an external amplifier, connect REMOTE on the external amplifier to the previously cut lead wire on the side of the connector.



4. The lead include with the unit must be connected to the specified position of the vehicle's ISO connector in order to use the "triggered audio mute for cellular telephones"function.(Figure 3)



short-circuits at the connection

Figuire 3

TROUBLESHOOTING

Problem	Cause	Measure	
Nothing happens when buttons are pressed. Display is not accurate.	The microprocessor has malfunctioned due to noise,etc.	Remove the DCP and press the seconds with a thin rod.	reset button for about 2 Reset button

ERROR DISPLAYS

If an error occurs, one of the following displays is displayed. Take the measure described below to eliminate the problem

	Error display	Cause	Measure
CD	ERROR 2	A CD is caught inside the CD deck and is not ejected.	This is a failure of CD deck mechanism
	ERROR 3	A CD cannot be played due to scratches.etc.	Replace with a non-scratched, non-warped disc
	ERROR 6	A CD is loaded upside-down inside the CD deck and does not play.	
CD	ERROR 2	A CD inside the CD changer is not loaded.	This is a failure of CD changer's mechanism.
CHANGER	ERROR 3	A CD inside the CD changer cannot be played due to scratches,etc.	Replace with a non-scratched non-warped disc.
	ERROR 6	A CD inside the CD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
MD CHANGER	ERROR H	Displayed when the temperature in the MD changer is too high and playback has been stopped automatically.	Lower the surrounding temperature and wait for a while to cool off MD changer.
	EEROR 2	An MD inside the MD changer is not loaded.	This is a failure of MD changer's mechanism.
	ERROR 3	An MD inside the MD changer cannot be played due to scratches, etc.	Replace with a non-scratched,non-warped disc.
	ERROR 6	An MD inside the MD changer cannot be played because it is loaded upside-down.	Eject the disc then reload it properly.
		Displayed when a non-recorded MD is loaded in the MD changer.	Load a pre-recorded MD in the MD changer.

If an error display other than the ones described above appears press the reset button.

EXPLANATION OF IC pin 48: CD RESET : O: The reset pulse output to the CD IC pin 49: CCF : O : The chip enable signal output 052-3377-00 M30624MGA-E37FP pin 50: BUC CLOCK : O : CD IC clock pulse output System controller pin 51: BUS 3 :I/O: CD IC Data input / output 1. Terminal Description pin 52: BUS 2 1/O: CD IC Data input / output. pin 1: NU : - : Not in use. nin 53: RUS 1 :I/O: CD IC Data input / output. pin 2: NU : - : Not in use. pin 54: BUS 0 :I/O: CD iC Data input / output. pin 3: REMOCON :IN: Remote controller signal input terminal pin 55 CD 5V O: Power supply control signal output for the pin 4: TIME BASE :IN: Time base pulse input. CD IC / DAC IC "H"= ON nin 5 SBSY IN: Sub-Q data request pulse input from the pin 56: NU Not in use. CD IC pin 57: NH : - : Not in use pin 6: RDS DATA : N: RDS serial data input. pin 58 NU : - : Not in use pin 7: RDS CLK :IN: RDS clock pulse input. pin 59: NU : - : Not in use pin 8: BYTE :IN: Connect to the ground. pin 60: NU - : Not in use pin 9: CN VSS :IN: Connect to the ground nin 61: NII - : Not in use pin 10: NU : - : Not in use pin 62: VDD - : Positive supply voltage. pin 11: NU - Not in use. pin 63: INIT :IN: For PE-2469E = "H", For PE-2470E = "L" pin 12: RESET IN: Reset signal input. pin 64: VSS - : Negative supply voltage. pin 13: X OUT . O : Crystal connection pin 65: NU - : Not in use pin 14: VSS : - : Negative supply voltage pin 66: NU - : Not in use pin 15: X IN : IN: Crystal connection. pin 67: LCD SO : O : Serial data output to the LCD driver pin 16: VDD : - : Positive supply voltage. pin 68: LCD CE . O : The chip enable signal output to the LCD pin 17 NU - : Not in use. pin 18: ACC DET :IN: ACC detection signal input pin 69: VOL CW IN: Volume control pulse input from the rola-.IN: Backup detection signal input. pin 19: BU DET pin 70: VOL CCW IN: Volume control pulse input from the rolapin 20: KEY INT :IN: Key interrupting signal input ry encoder pin 21: 29pin connect : IN: Connect to 29 pin pin 71: LCD SI IN: Serial data input from the LCD driver pin 22: NU : - Not in use oin 72 LCD CLK O: The clock pulse output to the LCD dr.v-: - : Not in use pin 23. NU pin 24: NU : - : Not in use pin 73: Back light ON : O : Back light ON signal output. pin 25: NU : - : Not in use pin 74: AMP REM O : O: ON signal output to the amplifier. pin 26: NU : - : Not in use pin 75: AMP MUTE : O: Muting signal output to the Audio Power pin 27: RDS DIS CHG: O: RDS dis-charge signal output pin 28: RDS MUTE : O : RDS mute signal output. pin 76: SYS MUTE O: System muting signal output. nin 29: IF BUS BY :IN: IE Bus serial data input. pin 77: NU - Not in use pin 30: IE BUS TX : O : IE Bus serial data output. pin 78: Z MUTE CUT O: Command pulse output to cut the CD zelo pin 31: MUTE SPD UP: O: Station detection speed up command outcross mute signal.

pin 32: RDS TEST ST : O : Outputting "H" without the test mode.

pin 33: FM ST/SD ... IN: At receiving the FM station in the test mode, this port detects the stereo signal And at seeking or scanning, this port detects the station detection signal.

pin 34: PLL CE ... O : The chip enable signal output to the PLL

put for RDS

pin 35: PLL SO
pin 36: PLL S1
pin 37: PLL CLK
pin 38: NU

pin 38: NU : - : Not in use.
pin 39: NU : - : Not in use.
pin 40: ILL DET : IN: Illumination

pin 40: ILE DET :IN: Illumination ON signal input.
pin 41: KEY ILL REM : O : Key illumination ON signal output.
pin 42: LD MUTE :O : Muting signal output to the CD mechanism.
pin 43: LD CONT :I/O: Communication line with the CD mechanism.

pin 43: LD CONT :://O: Communication line with the CD mechanism.

pin 44: TR A ::IN: Photo sensor signal input from the CD

pin 44: TR A

(IN: Photo sensor signal input from the CD mechanism.)

pin 45: TR B

(IN: Photo sensor signal input from the CD

mechanism.
pin 46: CHUCK SW :IN: CD disc chucking signal input.

:IN: Inside limit signal input from the CD mechanism.

pin 98: Vref pin 99: A VDD

pin 79: NU

pin 80: NU

pin 84: NU

pin 85: NU

pin 86: NU

pin 87: NU

DIN 88: NU

pin 92: NU

pin 93; NU

pin 89: SYS ACC

pin 91: Power ON

pin 94: S METER

pin 95: NOISE 1

pin 90:5V REM

pin 81: VOL DATA

pin 83: PHONE INT

pin 82: VOL CLK

pin 96: A VSS . - . Analog ground.
pin 97: KEY AD : IN: Input terminal of A/D converter for Key judgment

- : Reference voltage

the RDS-noise-level

- : Not in use

: - : Not in use

: - : Not in use

- : Not in use

: - : Not in use

: - : Not in use

- Not in use

- : Not in use.

- : Not in use

O: ACC detect signal output.

O: The serial data output to the volume IC.

: O : The clock pulse output to the volume IC.

:IN: The telephone interrupt signal input.

O:5V power supply ON signal output.

: IN: The input terminal of internal A/D convert-

er to monitor the radio field strength

IN: Input terminal of the internal ADC to sense

O: ON signal output to BA4905-V3.

: - : Positive supply voltage for the Analog section.

pin100; NU : - : Not in use

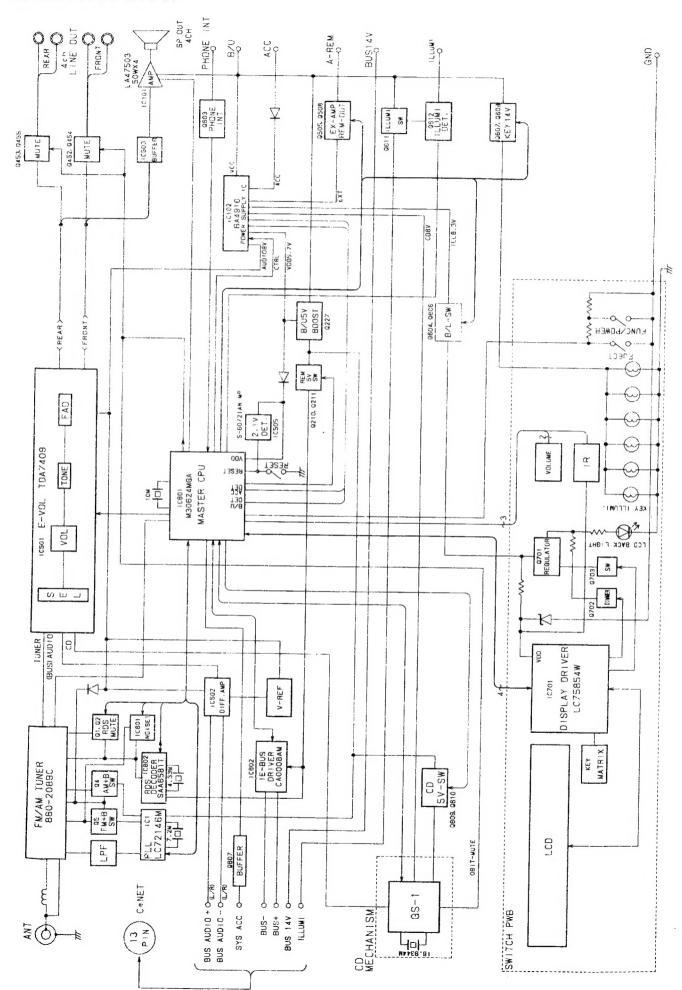
ADJUSTMENT

FM section

pin 47: S STOP

Item	Procedure	Measuring instrument
S-meter	 Input the 98.1MHz/30dB μ/400Hz(main90%+pilot10%)signal. Turn on the power and press the CD PLAY button & PRESET No.6 button at the same time for about 2 seconds. (TEST MODE) Adjust the reading of LCD display to [24	SG

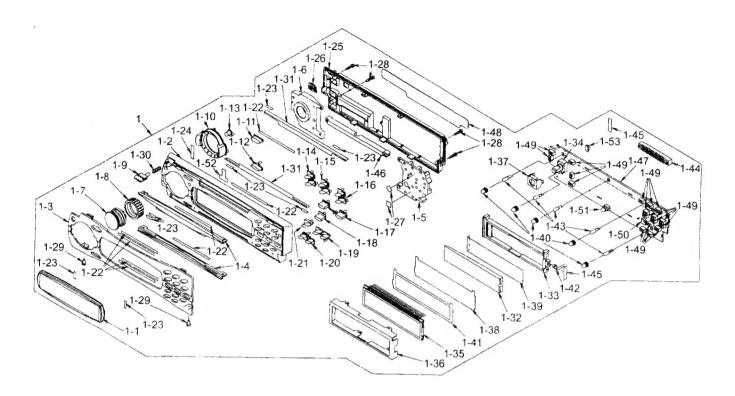
BLOCK DIAGRAM



-5-

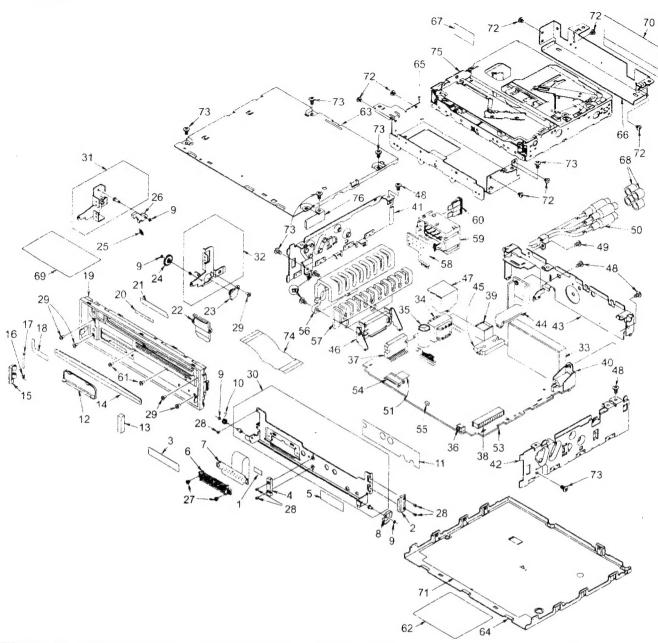
■EXPLODED VIEW · PARTS LIST

DCP section



NO.	PART NO.	DESCRIPTION	Q'TY
1	DCP-387-700	DCP ASSY	1
1-1	373-0985-00	DIAL COVER	1
1-2	370-5993-02	ESCUTCHEON	1
1-3	371-5711-00	FACE PANEL	1
1-4	335-6686-00	ILLUMI PLATE	2
1-5	335-6687-00	ILLUMI PLATE	1
1-6	335-6688-01	ILLUMI PLATE	1
1-7	380-5536-00	KNOB	1
1-8	345-8670-00	RUBBER(KNOB)	1
1-9	382-6403-00	BUTTON(OPEN)	1
1-10	382-6404-00	BUTTON(SRCH)	1
1-11	382-6405-00	BUTTON(FUNC)	1
1-12	382-6406-00	BUTTON(A/M)	1
1-13	382-6407-00	BUTTON(P/P)	1
1-14	382-6408-00	BUTTON(1/4)	1
1-15	382-6409-00	BUTTON(2/5)	1
1-16	382-6410-01	BUTTON(3/6)	1
1-17	382-6411-00	BUTTON(PS/AS)	1
1-18	382-6412-00	BUTTON(AF)	1
1-19	382-6435-00	BUTTON(BAND)	1
1-20	382-6436-00	BUTTON(DISP)	1
1-21	335-6689-00	IR-FILTER	1
1-22	347-6745-00	DOUBLE FACE	8
1-23	347-6695-00	DOUBLE FACE	8
1-24	347-6697-00	SHADE	1
1-25	335-6493-02	REAR COVER	1
1-26	382-6109-00	BUTTON(EJECT)	1
1-27	347-6696-00	FILM	2

NO.	PART NO.	DESCRIPTION	Q'TY
1-28	716-0872-12	PAD SCREW	4
1-29	714-2003-87	MACHINE SCREW(M2×3)	2
1-30	750-6721-00	SPRING	1
1-31	347-6744-00	FILM	2
1-32	335-6673-00	ILLUMI PLATE	1
1-33	335-6674-00	LCD HOLDER	1
1-34	016-9900-84	ROTARY ENCODER	1
1-35	379-1231-41	INDICATOR	1
1-36	331-3309-00	LCD COVER	1
1-37	331-3337-00	VR HOLDER	1
1-38	347-6692-00	FILM	1
1-39	347-6693-00	REFLECTOR	1
1-40	345-8681-00	LAMP CAP	5
1-41	347-6694-00	FILM	1
1-42	001-7046-00	LED	1
1-43	017-0444-00	PILOTLAMP(14V50mA)	5
1-44	076-0647-00	PLUG(16P)	1
1-45	347-6698-00	SHADE	2
1-46	335-6778-00	ILLUMI PLATE	1
1-47	039-2075-00	SWITCH PWB (WITHOUT COMPONENT)	1
1-48	347-6773-00	HEAT PROTECT	1
1-49	013-6305-50	TACT SWITCH	18
1-50	060-4008-00	IR RECEIVER	1
1-51	017-0433-62	PILOTLAMP(14V40mA)	1
1-52	347-6704-00	SURGE FILM	1
1-53	013-6511-50	LUMI SWITCH	1

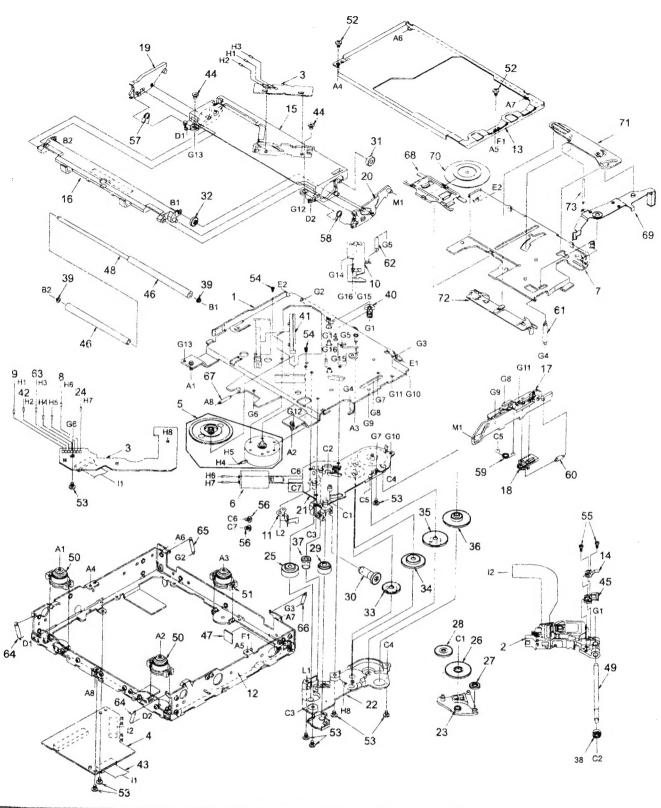


NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	347-6356-00	DOUBLE FACE	1	18	347-6483-00	HEAT PROTECT	1
2	335-6500-01	ноок	1	19	370-5766-07	INNER ESCUTCHEON	1
3	347-6523-00	FPC SUPPORT	1	20	347-5923-00		1
4	335-6502-00	SLIDER	1	21	347-5920-00		1
5	291-0092-00	STICKER	1	22	335-5817-00	ILLUMI PLATE	1
6	074-1278-00	OUTLET SOCKET(16P)	1	23	613-0687-00	GEAR DAMPER	1
7	039-1862-00	FLEXIBLE PWB	1	24	613-0683-00		1
8	613-0684-00	FAN GEAR	1	25	750-3341-00	SPRING	1
9	746-0761-00	WASHER	3	26	335-6498-00	HOOK LOCK	1
10	750-3342-21	SPRING	1	27	716-3444-00		2
11	290-7995-00	LABEL	1	28	738-1722-17	PRECISION SCREW	5
12	335-6499-00	CONNECTOR COVER	1	29	780-2004-01	SCREW	5
13	345-8607-00	CUSHION	1	30	946-0078-02	HOLDER ASSY	1
14	346-0114-01	LEATHER SHEET	1	31	T	ARM L ASSY	1
15	335-6501-01	HOOK DCP	1	32	946-0072-01	ARM R ASSY	1
16	750-3454-00	SPRING	1	33	880-2089C	TUNER	1
17	341-1764-00	SHAFT	1	34	009-9006-60	CHOKE	1

NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
35	042-0447-00	ELE-C(16V2200uF)	1	57	313-1818-00	HEAT SINK	1
36	013-6100-00	SWITCH	1	58	039-1400-30		1
37	051-2041-00	IC(LA47503)	1			(WITHOUT COMPONENT)	1
38	074-1138-76	OUTLET SOCKET(26P)	1	59	074-1285-00		1
39	074-1194-00	OUTLET SOCKET(13P)	1	60	060-0057-57	AUTO FUSE(15A)	1
40	092-4000-51	ANT RECEPTACLE	1	61	780-2004-01	SCREW	2
41	305-0274-31	SIDE COVER(L)	1	62	286-9925-00	SETPLATE	1
42	305-0275-30	SIDE COVER(R)	1	63	303-0472-04	UPPER COVER	1
43	307-0628-01	REAR COVER	+ 1	64	304-0460-01	LOWER COVER	1
44	313-1846-00	HEAT SINK	1 1	65	331-3323-00	CD-SUB-BRKT(F)	1
45	051-3297-10	IC(BA4916)	+	66	331-3324-00	CD-SUB-BRKT(R)	1
46	331-2255-20	IC HOLDER	1 1	67	347-6766-00	INSULATOR	1
47	331-2820-00			68	345-3799-20	RUBBER CAP	4
48	+	SHIELD CASE		69	347-6729-00	INSULATOR	1
	714-3006-81	MACHINE SCREW(M3×6)	4	70	347-6705-00	INSULATOR	1
49	731-3006-80	TAPTIGHT(M3×6)	1	71	347-5918-00	INSULATOR	1
50	855-5428-50	RCA PIN CORD	11	72		MACHINE SCREW(M2.6×3)	7
51	347-6215-00	SPACER FILM	1	73		TAPTIGHT M3×6)	7
52	731-3008-89	TAPTIGHT	2	74		FLAT WIRE(26P)	+
53	039-2073-01	MAIN PWB (WITHOUT COMPONENT)	1	75		CD MECHANISM	1
54	074-1198-68	OUTLET SOCKET(18P)	1 1	76	331-2744-00		1
55		LED	+ 1	77	†	E-RING	
56	313-1817-00	HEAT SINK	+ 1			2.1110	1

CD mechanism section

NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	966-0595-25	DRIVE PLATE ASSY	1	27	621-0610-20	IDLE GEAR A	1
2	969-0060-30	PICK UP UNIT	1	28	621-0611-20	IDLE GEAR B	1
3	039-1944-21	LED PWB (WITHOUT COMPONENT)	1	29	621-0612-21	ROLLER GEAR A	1
4	039-1945-20	CD PWB	1	30	621-0613-20	ROLLER GEAR B	1
		(WITHOUT COMPONENT)		31	621-0614-20	ROLLER GEAR C	1
5	SMA-182-100	MOTOR ASSY(SPINDLE)	1	32	621-0615-21	ROLLER GEAR D	1
6	SMA-183-100	MOTOR ASSY(SLED)	1	33	621-0616-20	POWER GEAR A	1
7	620-1024-22	CLAMPER LINK	1	34	621-0617-20	POWER GEAR B	1
8	803-4906-60	VINYL COAT WIRE(ORG)	1	35	621-0618-20	POWER GEAR C	1
9	816-2591-00	LEAD WIRE(YEL)	1	36	621-0619-20	POWER GEAR D	1
10	620-1025-22	ID-LOCK PLATE	1	37	621-0620-20	THREAD GEAR A	1
11	620-1026-21	SPRING PLATE	1	38	621-0621-20	THREAD GEAR B	1
12	620-1027-25	LOWER CHASSIS	1	39	621-0622-21	ROLLER SLEEVE	2
13	620-1028-22	UPPER CHASSIS	1	40	621-0623-21	LS-HOLDER	1
14	966-0638-20	SH-RACK ASSY	1	41	621-0624-22	GUIDE RAIL	1
15	621-0598-26	UPPER GUIDE	1	42	816-2593-00	LEAD WIRE(PUR)	1
16	621-0599-25	ROLLER GUIDE	1	43	816-2542-01	FLAT WIRE(10P)	1
17	621-0600-25	SHIFT LEVER	1	44	716-3473-00	SCREW	2
18	621-0601-21	RACK	1	45	621-0709-20	SH-BASE	1
19	621-0602-22	LOCK ARM L	1	46	621-0629-20	LOADING ROLLER	2
20	621-0603-25	LOCK ARM R	1	47	345-8704-20	CUSHION RUBBER	1
21	621-0604-22	GEAR BASE	1	48	622-1571-21	ROLLER SHAFT	1
22	621-0605-22	GEAR COVER	1	49	624-0018-01	LEAD SCREW	1
23	621-0606-21	IDLE CASE	1	50	629-0081-20	DAMPER F	2
24	816-2590-00	VINYL COAT WIRE(GRN)	1	51	629-0082-20	DAMPER R	1
25	621-0608-21	SECOND GEAR	1	52	714-2003-81	MACHINE SCREW	2
26	621-0609-20	BASE GEAR	1	53	716-1507-00	SCREW	9



NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
54	716-1733-00	SCREW	2	64	750-3472-21	DR-SPRING F	2
55	716-3469-00	SPECIAL SCREW	2	65	750-3473-20	DR-SPRING RA	
56	716-3446-00	SCREW	2	66	750-3474-20		
57	750-3465-21	ROLLER SPRING L	1	67	 	DR-SPRING C	
58	750-3466-20	ROLLER SPRING R	1	68		CLAMPER PLATE	1
59	750-3467-21	SHIFT SPRING	1	69		SENSOR APM	1
60	750-3468-20	RACK SPRING	1	70		CLAMPER RING	1
61	750-3469-20	CLAMPER SPRING	1	71	1	STOPPER LINK	1
62	750-3470-20	ID-LOCK SPRING	1	72		DISC STOPPER	1
63	816-2592-00	LEAD WIRE(BLU)	1	73		SENSOR SPRING	1

ELECTRICAL PARTS LIST

Main PWB(B1) section

Note) Several different parts of the same reference number are alternative parts.

One of those parts is used in the set.

REF No. DESCRIPTION REF	Main P	n PWB(B1) section One of those parts is used in the set.								
890-2089C								PART No.	DESCRIPTION	
168-2201-50 22pF CH				. 1			IC101	051-2041-00		
166-201-50 226 041				5			1 (
188-1032-55 0.01							1 (
168-1032-55 0.01				1	1	1	1	051-0350-93	NJM4558M	
188-223-55 0.02 2					4		1 (051-0556-93	NJM2058M	
CP 168-293-56 100 22 μ F						,	10505	051-5437-08		
182-473-57 394-7 μ F C595 166-101-50 100pF CH C6907 168-1023-55 0.00pF μ F C591 168-1023-55 0.00pF μ F C591 168-1032-55 0.00pF μ F C591 168-1032-55 0.00pF μ F C591 168-2032-55 0.00p μ F C591 168-2032-55 0.00 μ F C591 168-2032-55 0.00 μ F C591 168-2032-55 0.00 μ F C591 188-2033-55 0.00							10601	052 3377 00		
188-1032-55 0.00 μ μ							1 }	052-5577-00	M30624MGA-E3/FP	
168-1022-55 10000pf										
182-103-87 50 VI F Cot 186-4732-78 0.047 F 186-103-255 0.01 F Cot 186-823-255 0.018 F Cot 186-823-255 0.022 F Cot 186-823-255 0.022 F Cot 186-823-255 0.022 F Cot 186-823-255 0.022 F Cot 186-823-255 0.0022 F Cot 186-823-255 0.0022 F Cot 186-823-255 0.0022 F Cot 186-823-255 0.0022 F Cot 186-101-50 1.0000 Cot Lot 1.000-203-304 2.00 H Cot 186-823-255 0.0022 F Cot 186-101-50 1.0000 Cot Lot 1.000-203-304 2.00 H Cot 186-823-255 0.0022 F Cot 186-101-50 1.0000 Cot Lot Lot 1.000-203-304 2.00 H Lot 1.000-203-304 2.000	C10	168-1022-55	1000pF	C537						
168-232-55 0.002 μ	C11			C612	168-4732-78	0.047 μF	J601	074-1194-00	13P CE-NET	
168-1832-55 0.018 μF				•	168-1032-55	0.01 µF	J602			
19.2 4763-39 16447 μF					1	,	1 1	074-1138-76	26P	
168-2732-55 0.022 μ							! !			
188-232-56 0.022 \(\nu \)				1			1 (
168-6822-55 8800pF							i 1	010-2230-38	220 μH	
C221 182-1073-25 10V100 μF C622 168-1011-50 100pF CH L603 101-3100-65 2 μH				1				010-3100-66	2.2uH	
182-4763-39 16447 μ							2 1	010-3100-66	2.20H	
168-122-55 1200pF			'				1 1	010-3100-65	2.2uH	
168-104-5-65 0.1 μF	C23	168-1222-55	1200pF			·	1 1			
182-1083-07 50V1 μF C626 186-1011-50 1000F CH C626 182-22-58 2000F C627 182-4783-19 63 347 μF C626 186-1022-55 10000F CH C628 180-1012-50 1000F CH C629 166-1011-50 1000F CH C629 166-1011-50 1000F CH C629 166-1011-50 1000F CH C629 166-1011-50 1000F CH C630	C24	168-1045-56	01µF	1			, ,	;		
168-8222-55 220pF C626 168-1022-55 1000pF C1 C627 188-2763-19 6 3 V47 μ F C628 168-1032-55 0.01 μ F C629 168-1013-50 100pF CH C621 168-1013-50 100pF CH C621 168-1013-50 100pF CH C621 168-1013-50 100pF CH C621 168-222-25 1000pF CH C621 125-2004-96 RN1406 C621 168-222-25 1000pF CH C621 125-2004-96 RN1406 C621 178-2242-78 0.22 μ F C631 168-1011-50 100pF CH C622 139-1685-90 2251850 C622 μ F C631 168-223-25 0.022 μ F C631 125-200-96 RN1406 C631 178-223-31-15 0.033 μ F C631 168-233-25 0.022 μ F C631 125-200-96 RN1406 C631 172-3331-15 0.033 μ F C631 168-233-25 0.022 μ F C631 125-200-96 RN1406 C631 172-3331-15 0.033 μ F C631 168-261-25 560pF C631 125-200-93 RN1403 C631 1	C25	182-1053-67	50V1 μF	C625			1 1			
168-1032-55 0.01 μ F C629 166-1011-50 100pF CH C70 125-001-97 RN24227 125-001-96 RN1406 C70					1		Q3			
166-1011-50 100pF CH C629 166-1011-50 100pF CH C021 125-0013-97 RN2427								190-1162-00	2SA1162	
166-1011-50 100pF CH			,	1						
168-3312-55 330pF				1						
166-1501-50 15pF CH										
136-1801-50 18BF CH										
178-2242-78 0.22 μ							1 1			
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182-2253-37 16V22 μF C805 188-2232-55 0.022 μF C806 182-2253-67 50V2.2 μF C806 182-2253-67 50V2.2 μF C807 182-2253-67 50V2.2 μF C807 183-2253-15 50.033 μF C808 166-4701-50 476 F CH C809 125-2004-96 RN1406 C8111 172-3331-15 0.033 μF C810 168-5601-55 566pF CH C907 125-2004-96 RN1406 C8112 172-3331-15 0.033 μF C810 188-6612-55 566pF CH C907 125-2004-96 RN1406 C811 182-4763-19 63-V47 μF C812 188-4743-67 50V0.47 μF C812 168-1045-56 0.1 μF C812 168-1045-56 0.1 μF C812 168-1045-56 0.1 μF C812 168-1045-56 0.1 μF C812 168-203-17 63-V22 μF D103 001-0466-90 S5688B C903 190-1162-00 28-4162 C812 182-2263-17 63-V22 μF D103 001-0466-90 S5688B C903 190-1162-00 28-4162 C822 182-263-37 16V2 μF D105 D10466-90 S5688B C903 190-1162-00 28-4162 C822 182-263-37 16V2 μF D105 D10466-90 S5688B C903 190-1162-00 28-4162 C822 182-1063-37 16V10 μF D108 D10466-90 S5688B C909 125-2004-93 RN1403 C822 182-1063-37 16V10 μF D109 D10-466-90 S5688B C909 D104-1046-90 S5688B							Q455			
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172-3331-15 0.033 μ F C809 166-5601-50 566F CH Q507 125-2004-93 RN1403 C811 182-3331-15 0.033 μ F C810 168-5612-55 560pF Q508 125-0002-96 RN2406 C811 182-4763-19 6.3 V47 μ F Q602 125-2004-93 RN14103 C812 168-1045-56 0.1 μ F Q602 125-2004-93 RN14103 C812 C812 168-1045-56 0.1 μ F Q602 125-2004-93 RN14103 C812 C8						'				
172-3331-15 0.033 μF C810 188-3612-55 560pF C811 182-4763-19 6.3V47 μF C911 183-4743-67 50V0.47 μF C911 182-4763-19 6.3V22 μF C910 C911-466-90 S5688B C911-462-00 S5611-62 C911-62-00 S5612-50							1			
172-3331-15 0.033 μF C811 182-4763-19 6.3V47 μF Q509 125-2030-99 RN1410 Q602 125-2004-93 RN1410 Q602 125-2004-93 RN1410 Q602 Q501-162-00 Q541162 Q602 Q501-162-00 Q541162 Q602 Q541298 Q603 Q603 Q603 Q541298 Q603 Q603 Q603 Q5541298 Q603										
183-4743-67 50V0.47 μF C812 168-1045-56 0.1 μF Q602 125-2004-93 RN1403 RN	1			3 F	i	1				
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182-2263-17 6.3V22 μF D103 D01-0466-90 S5688B D606 190-1162-00 2SA1162 D104 D01-0466-90 S5688B D606 125-2004-93 RN1403 RN14033 RN14033 RN14033 RN14033 RN14033 RN14033 RN14033 RN14033 RN14033 RN1403		183-4743-67	50V0.47 μF							
2212 182-4763-39 16V47 μF D104 D01-0466-90 S5688B D607 199-1298-00 2SA1298 D105 D106 D01-0466-90 S5688B D607 D109-1298-00	0210 1	182-2263-17	5.3V22 μF	D103	001-0466-90	S5688B				
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$							R8	119-1021-15	/16W 1kΩ	
182-1053-67 50V1 μF D601 D603 D01-0516-90 MA111 MA150 MA150 MA111 MA150 MA111 MA150 MA150 MA111 MA150 MA150 MA111 MA150 MA150 MA111 MA150 MA150 MA150 MA111 MA150 MA150 MA150 MA111 MA150										
182-1053-67 50V1 μF D603 D606 D606 D609 MA111 R12 119-2221-15 1/16W 2.2k Ω D606 D609 MA111 R13 119-5631-15 1/16W 56k Ω D609 D610 D6							1			
182-1053-67 50V1 μF D606 001-0516-90 MA111 R13 119-5631-15 1/16W 56kΩ 182-1063-37 16V10 μF D610 001-0516-90 MA111 R15 119-1031-15 1/16W 10kΩ 182-1063-37 16V10 μF D801 D01-0516-90 MA111 R15 119-1031-15 1/16W 10kΩ R16 119-1231-15 1/16W 12kΩ R16 119-1231-15 1/16W 12kΩ R17 119-5631-15 1/16W 56kΩ R17 119-5631-15 1/16W 56kΩ R17 R17 R17 R17 R19-5631-15 1/16W 56kΩ R17 R19-5631-15 1/16W 56kΩ R17 R19-5631-15 1/16W 56kΩ R17 R19-5631-15 1/16W 56kΩ R19-5631-15 1/							3			
182-1063-37 16V10 μF D610 D01-0516-90 MA111 R14 119-1031-15 1/16W 10kΩ 182-1063-37 16V10 μF D611 D01-0516-90 MA111 R15 119-1031-15 1/16W 10kΩ 182-1063-37 16V10 μF D801 D01-0516-90 MA111 R16 119-1231-15 1/16W 12kΩ 182-1063-37 16V10 μF D802 D802 D804 D805										
182-1063-37 16V10 μF D611 D701-0516-90					1		1 1	1		
182-1063-37 16V10 μF D801 001-0516-90 MA111 R16 119-1231-15 1/16W 12kΩ 182-1063-37 16V10 μF D802 001-0516-90 MA111 R17 119-5631-15 1/16W 56kΩ					,					
182-1063-37 16V10 μF D802 001-0516-90 MA111 R17 119-5631-15 1/16W 56kΩ	506 1	82-1063-37 1	6V10 µF		:	1				
540 1400	507 1	82-1063-37 1	6V10 μF							
	512 1	82-4763-19	6.3V47 μF	IC1	051-6201-90 L	.C72146M		1		

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REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
R19	119-1521-15	1/16W 1.5kΩ	R508	032-0140-51	1/16W 15kΩ 1%	R628	116-1521-15	
R20	119-1021-15	1/16W 1kΩ	R509	119-3311-15		R630	119-0000-05	1/16W 0Ω JW
R21	119-2711-15		R537		1/16W 8.2k Ω	R634	119-1031-15	1/16W 10k0
R22		1/16W 100kΩ	R538	119-3321-15	1/16W 3.3kΩ	R635		1/16W 3.3kΩ
R23	119-1031-15		R540	119-2231-15		R640		1/16W 0Ω JW
R24	119-1021-15	1/16W 1kΩ	R541	119-1021-15		R642	119-1031-15	
R25	119-1021-15	1/16W 1kΩ	R542	119-3311-15		R643	119-5621-15	
R26	119-8211-15	1/16W 820 Ω	R551	119-4721-15		R652	119-1811-15	
R101	119-1231-15	1/16W 12kΩ	R553	119-4721-15		R653	119-1811-15	
R102	119-1031-15	1/16W 10kΩ	R554	119-1031-15		R654	119-1811-15	1/16M/ 180 O
R105	119-1021-15		R557	119-1031-15		R655	119-1041-15	
R204	119-3321-15	1/16W 3.3kΩ	R558	119-1031-15		R657	119-1811-15	
	119-1831-15	1/16W 18kΩ	R559	119-1031-15		R658	119-1521-15	
R207	119-1231-15	1/16W 12kΩ	R560	119-1031-15			119-4731-15	
R208	119-1011-15	1/16W 100 Ω	R561	119-1031-15			119-1531-15	
	119-3311-15	1/16W 330 Ω	R562	119-1031-15			119-4731-15	
210	119-1031-15	1/16W 10kΩ	R565	119-1031-15		1	119-2221-15	
2211	119-1541-15	1/16W 150kΩ	R601	119-2221-15			119-1031-15	
₹252	116-1521-15	1/8W 1.5kΩ	R602	119-2221-15			119-2221-15	
R470	119-4721-15	1/16W 4.7kΩ		116-6801-15			119-4721-15	1/16VV 2.2K \2
R471	119-4721-15	1/16W 4.7kΩ		119-3321-15			119-4721-15	
R472	119-4721-15	1/16W 4.7kΩ		119-2231-15		(119-3331-15	
R473	119-4721-15	1/16W 4.7kΩ		119-1031-15			119-1031-15	
	119-3311-15	1/16W 330 Ω		119-4731-15			119-1041-15	
	119-3311-15			119-4721-15			119-2211-15	
	119-3311-15			119-1041-15 1			119-1231-15	
	119-3311-15			119-1041-15 1			119-3321-15	
R481	119-1021-15			119-4731-15 1			013-6100-00	
	119-1021-15			119-4731-15 1		1 1		SP-141N-S00B
		I/16W 51kΩ 1%		119-1031-15 1			009-9006-60	23mH
3502	032-0140-58	/16W 51kΩ 1%		119-4711-15 1		1	012-6009-65 4	
		/16W 51kΩ 1%		119-3311-15 1			061-1066-00 7	
		/16W 51kΩ 1%		119-1031-15 1		1	060-1505-50 1	
		/16W 15k Ω 1%		116-1221-15 1		1	061-3013-00 4	
506		/16W 15k Ω 1%		119-1521-15 1			2017-0014	.JSIVITIZ
		/16W 15k Ω 1%		119-1031-15 1				

Switch PWB(B2) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C701	168-1022-55		PL705	017-0444-00	14V50mA	S702	013-6305-50	-
C702	168-4732-78		PL706	017-0433-62	14V40mA	S703	013-6305-50	
C703	168-4732-78		Q701	190-1162-00	2SA1162	S704	013-6305-50	
C704		10V10 μF TAN	Q702	125-2004-93		S705	013-6305-50	
C705	042-0416-52	10V10 μF TAN	Q703	125-2004-93		S706	013-6305-50	
D701	001-7046-00	NSPW310BS	R701	119-4731-15	1/16W 47k Ω	S707	013-6305-50	
D703	001-0529-14	MA8030-L	R702	119-1031-15	1/16W 10kΩ	S708	013-6305-50	
D704	001-0529-29	MA8051-M	R703	119-1011-15		\$709	013-6305-50	
	001-0529-41	MA8075-M	R704	119-1021-15		S710	013-6305-50	
	001-0529-41		R705	119-1011-15		1 1	013-6305-50	
	001-0529-41	MA8075-M	R706	119-2711-15			013-6305-50	
	001-0529-41	MA8075-M	R707	119-2211-15		11	013-6305-50	
	051-6013-00	LC75854W	R708	119-8211-15		11	013-6305-50	
	060-4008-00	RS171	R709	1	1/16W 100kΩ	11	013-6305-50	
	379-1231-41	LCD		119-3921-15			013-6305-50	
2701	076-0647-00	16P		119-2211-15			013-6305-50	
PL701	017-0444-00	14V50mA		119-2221-15		11	013-6305-50	
PL702	017-0444-00	14V50mA	1	119-2221-15			013-6511-50	
PL703	017-0444-00	14V50mA		119-3311-15			016-9900-84	
PL704	017-0444-00	14V50mA		013-6305-50		110120	010-9300-04	AK MASHAFT

ISO PWB(B3) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
J950	074-1285-00	ISO	FUSE	060-0057-57	15A

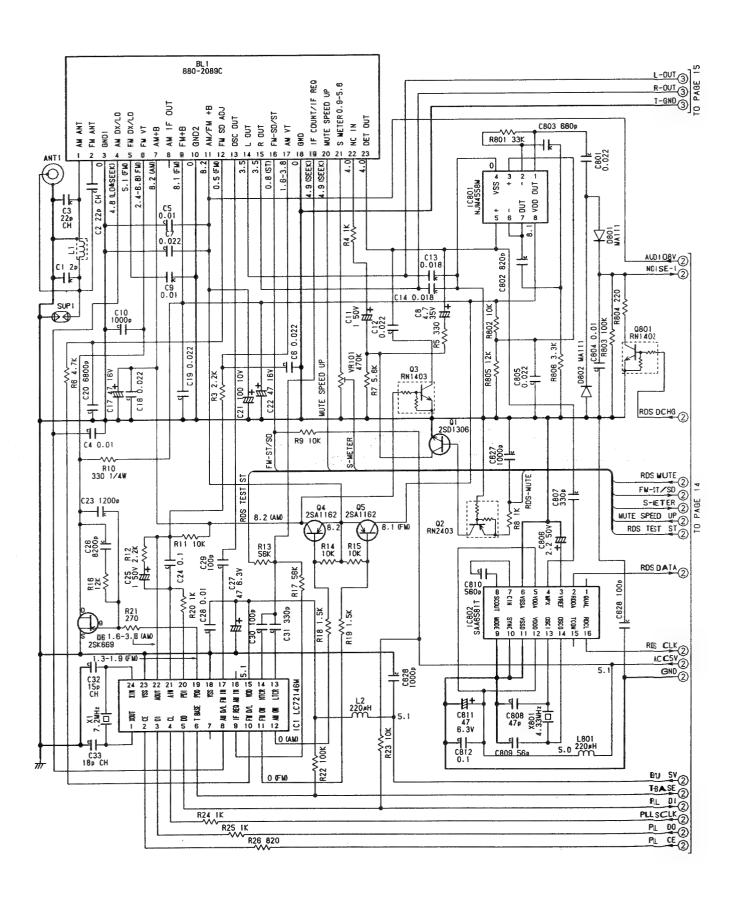
CD PWB(B4) section : CD mechanism

REF No. PART No. DESCRIPTION	REF No. PA	ART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C101 168-1042-78 0.1 μF C102 045-4701-50 47pF C103 046-4722-58 4700pF C104 168-1042-78 0.1 μF C105 046-1532-78 0.015 μF C106 046-1032-78 0.01 μF	C108 04 C109 04 C110 04 C111 16	46-1032-78 46-4722-58 46-1522-58 46-3332-78 68-1042-78 16-3332-78	0.01 μF 4700pF 1500pF 0.033 μF 0.1 μF	C113 C114 C115 C116 C117	168-1042-78 168-1042-78 046-4712-58 046-4712-58 043-0533-50 043-0533-50	0.1 μF 0.1 μF 470pF 470pF 0.047 μF

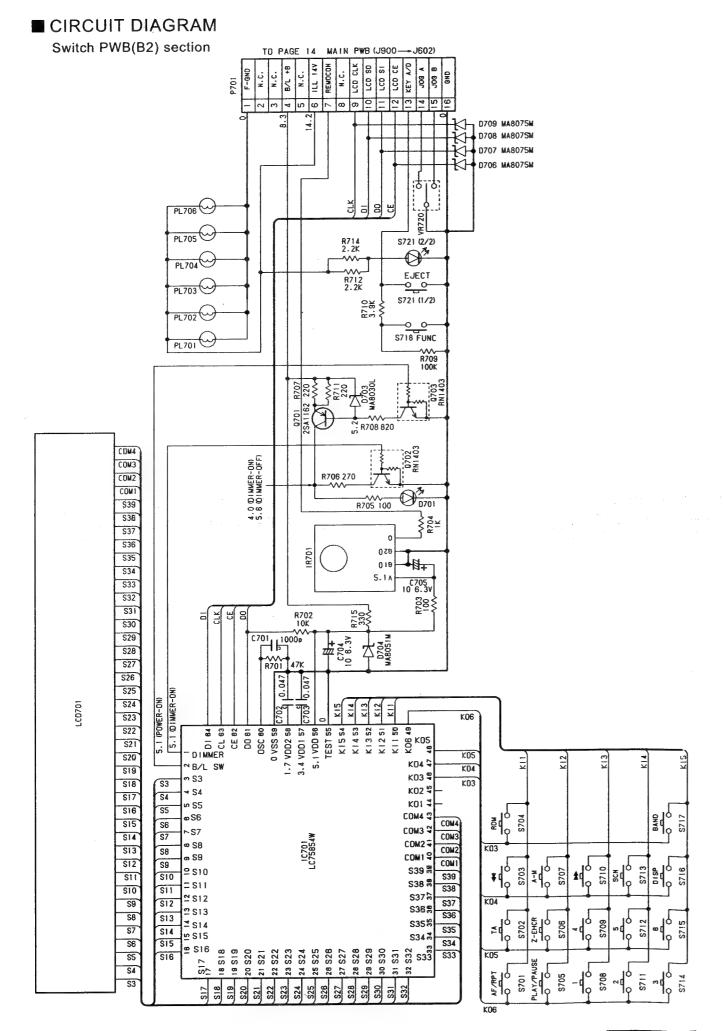
REF No.	PART No	DESCRIPTION	DEE NO	PART No.	DESCRIPTION	DEEN	DADEN	
	 			 	·			DESCRIPTION
C119	045-2701-50		C302	168-1042-78	1 '	R117	033-1021-15	
C120	045-1801-50		C303	043-0533-50	1 /	R131		1/16W 470Ω
C121	163-1063-35	,	D201	001-0516-90	MA111	R132	033-2211-15	1/16W 220 Ω
C122	178-1052-78	,	IC101	051-6376-00	TC94A14FA	R201	117-2201-15	
C123	046-1032-78	0.01 μF	IC102	051-3279-90	BA033LBSG	R202	117-2201-15	1/10W 22 Ω
C124	163-1073-05	4V100 μF	IC201	051-5710-90	TA2157F	R203	033-1041-15	1/16W 100k Ω
C125	168-1042-78	0.1 μF	iC301	051-6049-08	BA5983FP-E2	R204	033-1041-15	1/16W 100kΩ
C126	168-1042-78	0.1 μF	J101	074-1228-76	26P	R205	033-1041-15	1/16W 100k Ω
C129	178-1052-78	1 µF	J201	074-1138-65	15P	R206		1/16W 100kΩ
C201	163-3363-05	4V33 μF	J301	074-1138-60	10P			1/16W 100kΩ
0202	168-1042-78	0.1 µF	L101	010-2285-57	BLM21B102SPT		033-8231-15	
C203	178-1052-78	1 μF	1		BLM21B102SPT		033-6811-15	
C204	163-1073-05	4V100 μF	L103	010-2285-57	BLM21B102SPT		033-6831-15	
C205	163-3363-05	4V33 μF			BLM21B102SPT		033-1831-15	
	168-1042-78		L105	010-2285-57	BLM21B102SPT		033-2721-15	
2207	043-0533-50	0.047 µF	L401	010-3050-93	10 µH		033-1011-15	
208	046-6822-58	6800pF		131-1188-50			033-1021-15	
209	168-1042-78	0.1 μF	R102	033-5621-15	1/16W 5.6k Ω		033-1031-15	
2210	043-0533-50	0.047 μF	R104	033-4731-15	1/16W 47kΩ			1/16W 100kΩ
2211	168-1042-78	0.1 u F	R105	033-1041-15	1/16W 100kΩ		033-2211-15	
	168-1042-78	' 1	. 4	033-1531-15			117-6811-15	
2213	045-5096-50	5pF		033-1031-15			033-3921-15	
214	045-5601-50	56pF	1	033-1051-15			033-3921-15	
	043-0533-50			033-3321-15				i/16W 100kΩ
- 1	178-1052-78	'		033-2211-15			033-2211-15	
	045-1011-50			033-2211-15			060-1528-90	
	163-1073-35			033-1031-15				

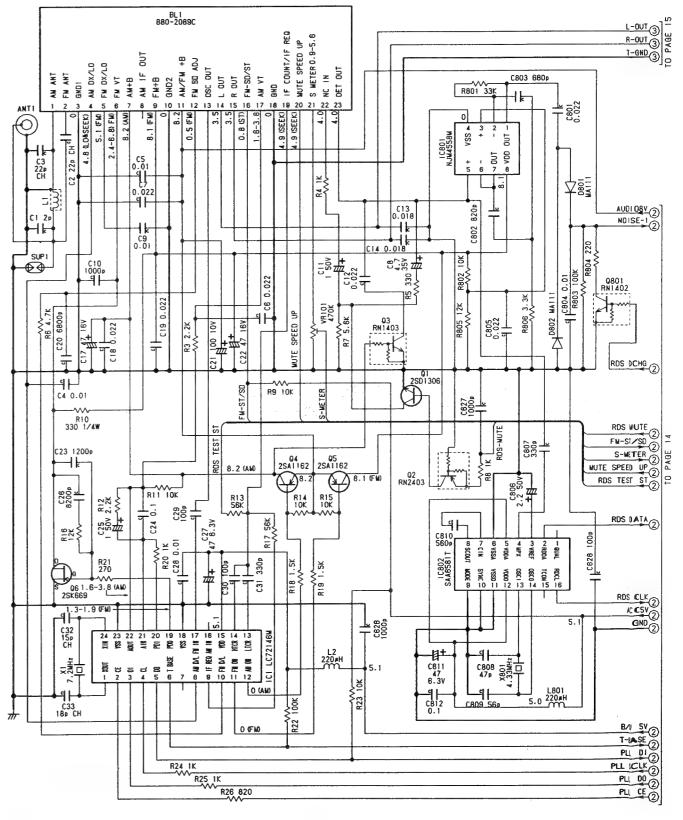
LED PWB(B5) section : CD mechanism

REF No.	PART No.	DESCRIPTION	REF No.	PART No	DESCRIPTION	REF No	PART No. DESCRIPTION
D1	001-7058-90	AN1105W-RR	Q1	060-4015-90	PS1192H	S2	013-7413-50 LIMIT
D2	001-7058-90	AN1105W-RR	Q2	060-4015-90	PS1192H		
J1	074-1138-60	10P	S1	013-7414-50	CHUCKING		

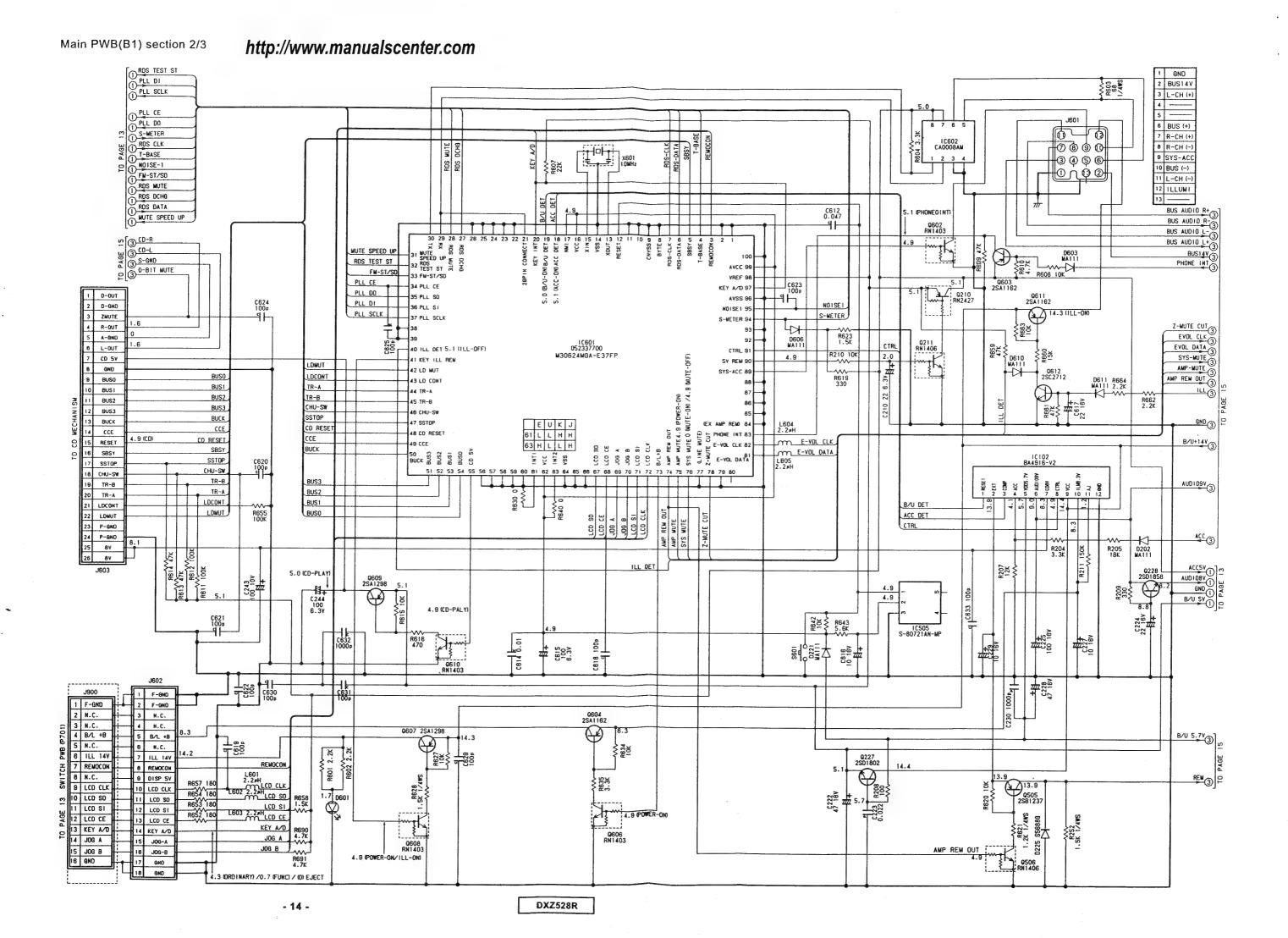


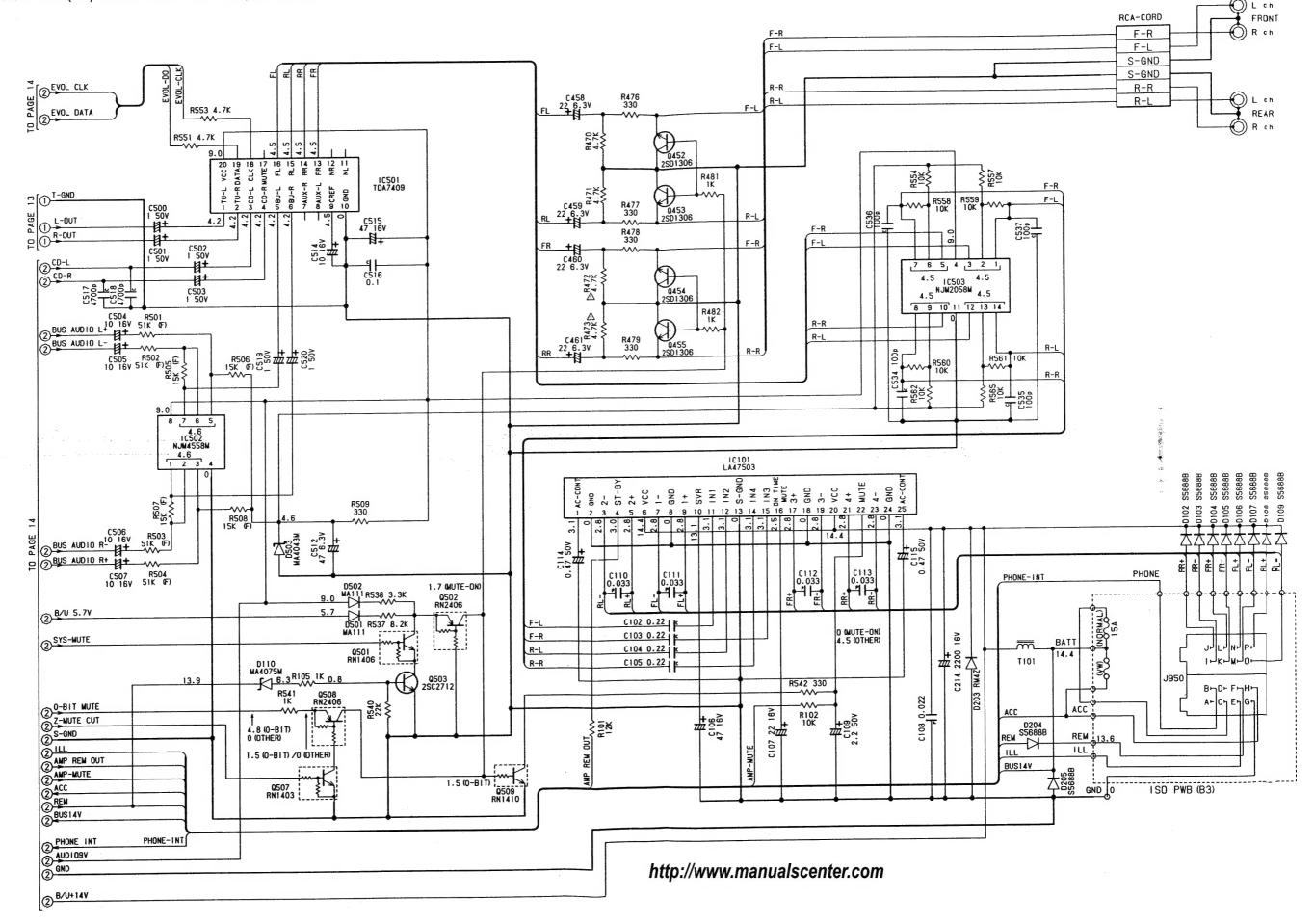
http://www.manualscenter.com

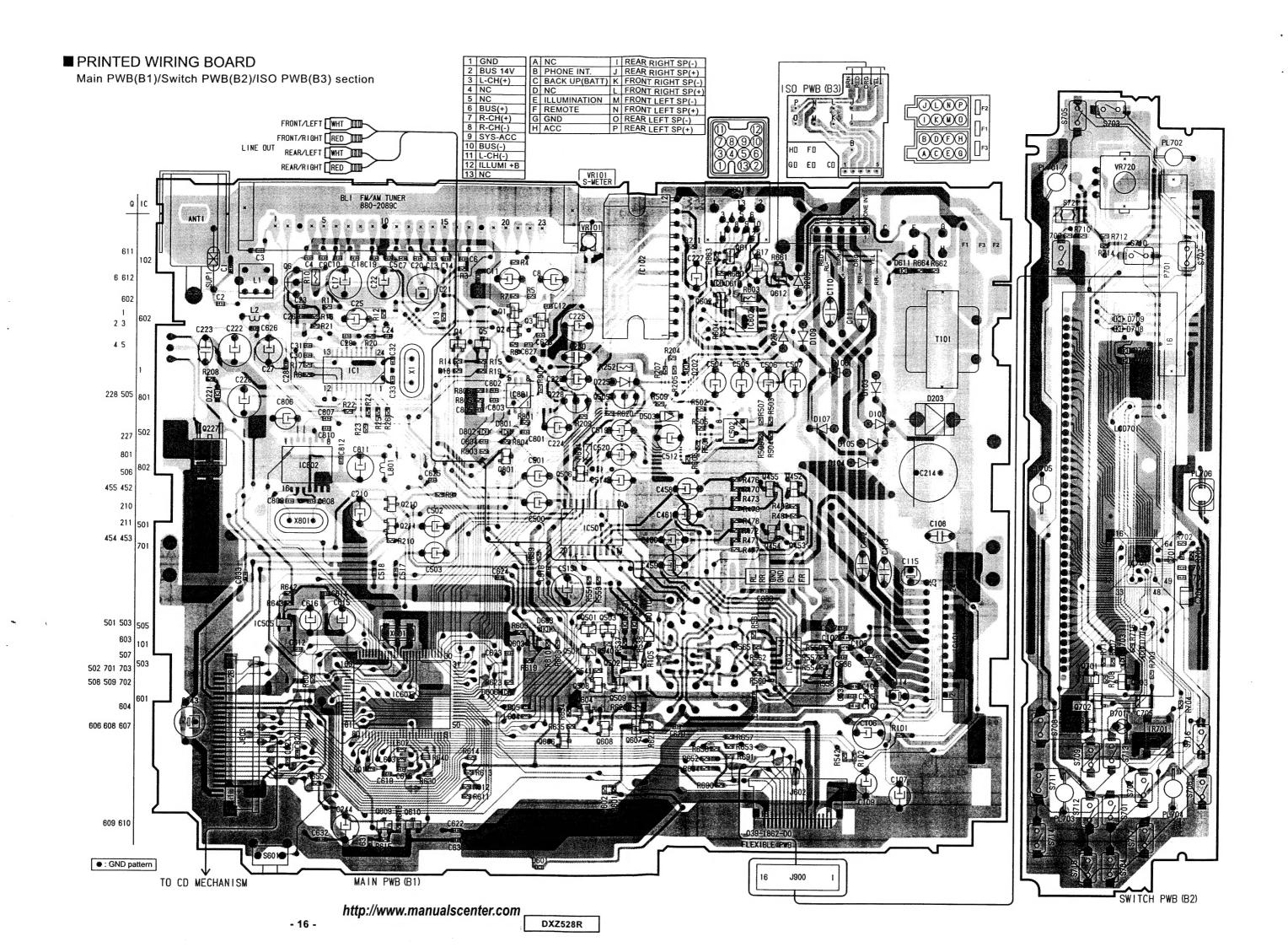




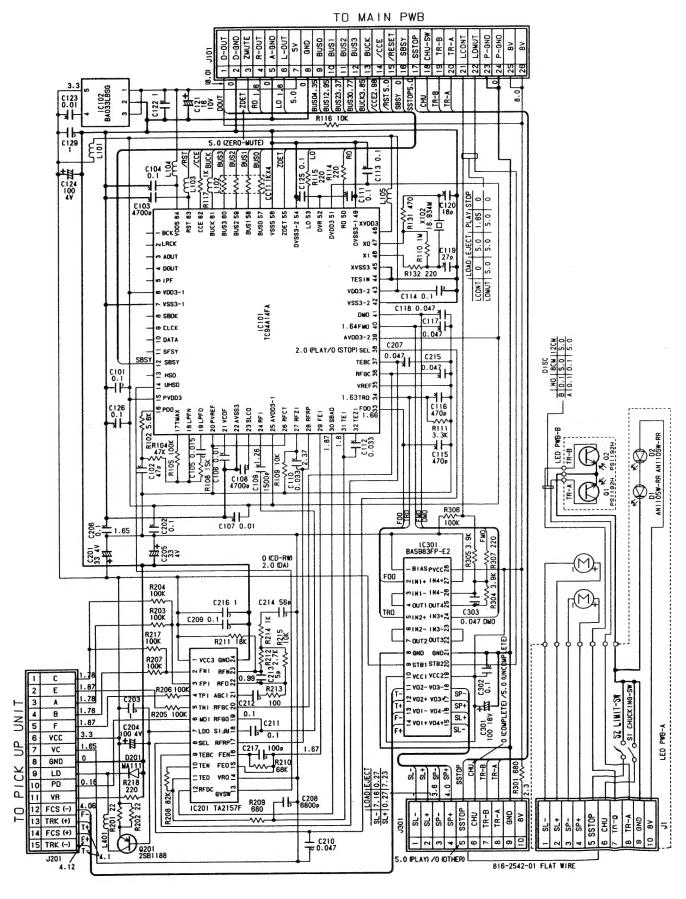
http://www.manualscenter.com







■ CIRCUIT DIAGRAM: CD PWB (B4) / LED PWB(B5) section



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■ CIRCUIT DIAGRAM: CD PWB (B4) / LED PWB(B5) section

